

A NOTE ON THE OCCURRENCE OF ROOT-SHOOTS IN *VACCINIUM CORYMBOSUM* L.

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Shoots arising from woody rhizomes in the lowbush blueberries in *Vaccinium* § *Cyanococcus* A. Gray are a well established fact (see, for example, Harshberger, 1916; Camp 1945; Eaton 1949; and Hall 1957). However the crown-forming highbush blueberry, *V. corymbosum* L., except for a few hexaploids ($2n = 6x = 72$) in the Florida Panhandle and on isolated mountain peaks in North Carolina and Tennessee and tetraploids ($2n = 4x = 48$) in eastern Quebec where this species introgresses with *V. angustifolium* Aiton (Vander Kloet 1980), rarely produces rhizomes and it has been argued that dispersion in *V. corymbosum* is strictly through the establishment of seedlings.

Thus when I was botanizing a *Gordonia* bayhead on the Archbold Biological Station, 10 km S of Lake Placid, Highlands County, Florida on 27.11.78 and saw several small *V. corymbosum* plants (Figure 1) growing 2–3(5) m away from several large shrubs, I presumed them to be seedlings. However on excavating several of these “seedlings”, I found that the “taproot” joined a lateral “rhizome” which meandered through the litter at a depth of 2–5 cm (Figure 1). These laterals could easily be traced back to the large shrubs 2–3 m away.

Cross sections of this “rhizome” (figure 2) showed no pith cells and confirmed my suspicion that indeed these were root-shoots. Furthermore, when I compared this cross section with those published by Hall (1957) I found that mine closely matched his cross section of the *V. myrtilloides* Michx tap root, but not the rhizome of *V. angustifolium*.

This is the first time that a root-shoot has been reported for *Vaccinium* § *Cyanococcus* but their frequency of occurrence is still imperfectly known. So far I have observed them only on diploid plants of *V. corymbosum* in Florida and Texas.

Root-shoots however are not entirely unknown in the angiosperms and have been reported for *Cirsium arvense* (L.) Scop., *Robinia pseudoacacia* L., and *Populus alba* L., inter alia. Moreover their occurrence in *V. corymbosum* certainly complicates our concept of the species' reproductive strategy.

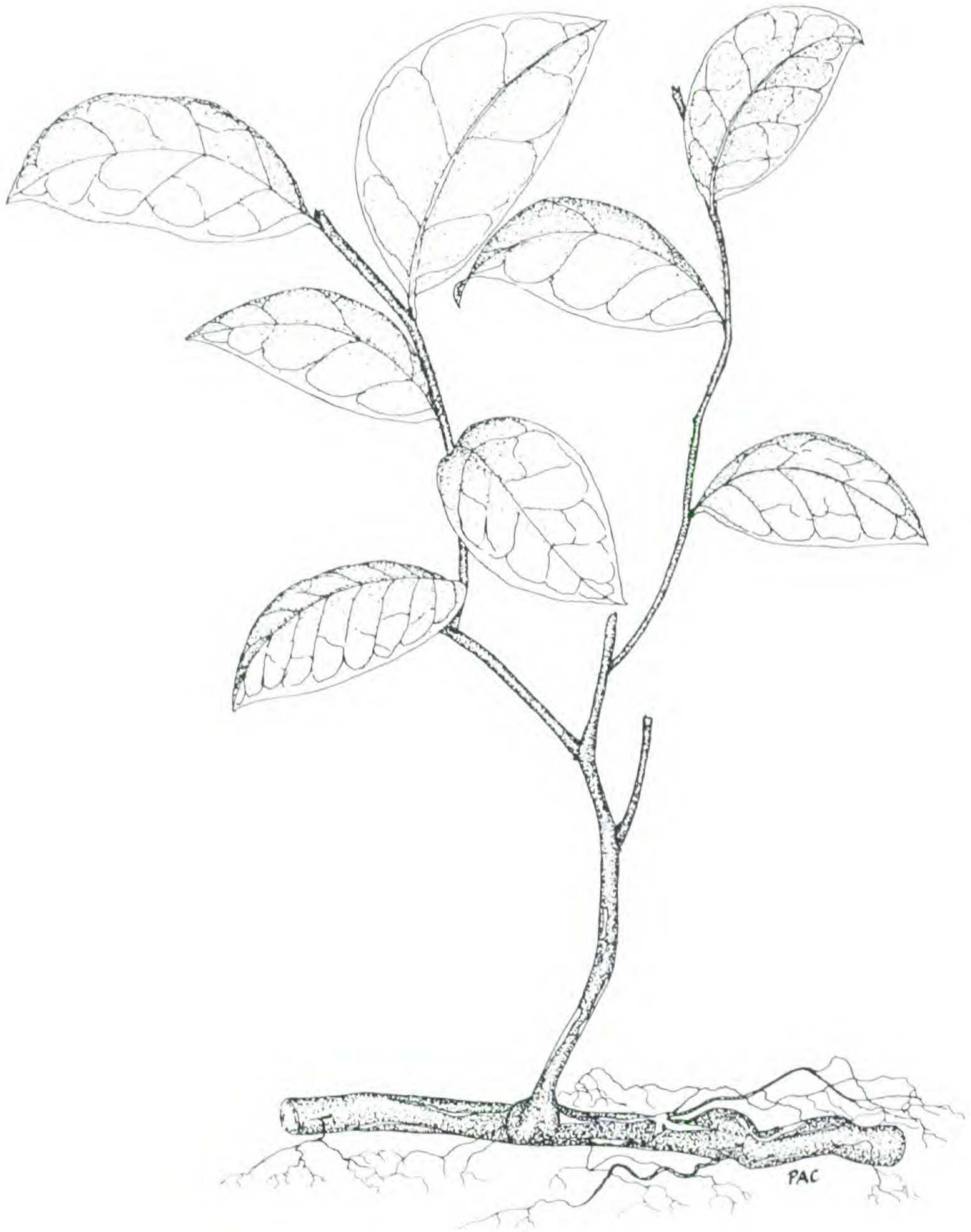


Figure 1. Root-shoot of *Vaccinium corymbosum* L. Voucher at ACAD, Vander Kloet 1271178. Magnified two times.

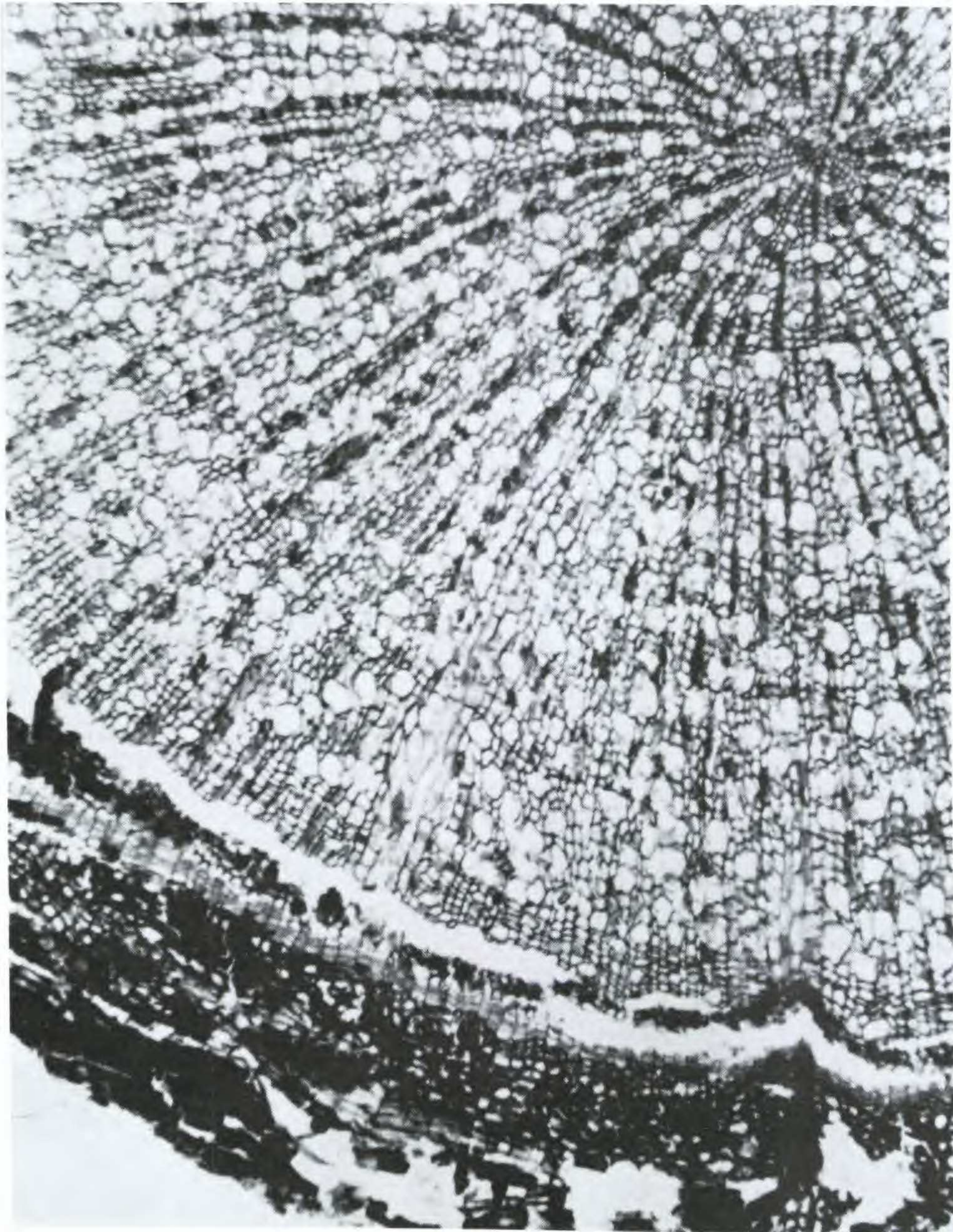


Figure 2. Cross-section of Root-shoot of *Vaccinium corymbosum* L. (Vander Kloet 11271178). Magnified 90 times.

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